

Amendments to the Abstract:

Please substitute the Abstract for the originally filed.

A method for floating at least one substance for growing a tissue part in a bioreactor. The method includes providing at least one substance consisting of one of a tissue part, a scaffold having cells deposited thereon, and a scaffold including a tissue part thereon. The method further includes further acting upon the substance with fluid, wherein the fluid holds the substance in free floatation. The fluid flows in a direction counter to gravity when a density of the substance is greater than a density of the fluid, and in a direction counter to buoyancy when a density of the substance is less than a density of the fluid. The bioreactor for floating at least one substance for growing a tissue part includes a container including a first flow chamber and at least one substance consisting of one of a tissue part, a scaffold having cells deposited thereon, and a scaffold including a tissue part thereon. The substance is acted upon with fluid. The bioreactor further includes an apparatus for conveying the fluid. The substance is arranged in the first flow chamber in such a manner that the fluid holds the substance in free floatation.